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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,451	11/12/2003	Dale Wolin	10012464-4	9435

7590 07/11/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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BERHANU, SAMUEL

ART UNIT	PAPER NUMBER
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2838

MAIL DATE	DELIVERY MODE
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07/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/712,451

Applicant(s)

WOLIN ET AL.

Examiner

Samuel Berhanu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04/09/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 9-11, 14, 15, 17, 26-28, 30, 31, 33 and 43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11, 14-15, 17, 26-28, 30-31 and 33 is/are allowed.
- 6) ☒ Claim(s) 43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al. (US 5,936,383) in view of Sakakibara (US 6,191,560), and in view of Iwaizono (US 6,714,882).

Regarding Claim 43, Ng et al. disclose in figure 1, a method of exercising a battery Coupled to a load, the method comprising the steps of: sensing a temperature related to the battery temperature and the temperature of the load (see column 5, lines 44-55), discharging the battery at said discharging current (see column 7, lines 20-22), discontinuing said discharging step when a predetermined battery voltage is reached (see column 3, lines 22-25), except for Ng et al. do not disclose explicitly, setting a discharging current in accordance with said temperature and setting a charging current in accordance with said temperature, said setting step further including the step of minimizing said discharging current when said temperature is higher than a first predetermined threshold value; and charging the battery at said charging current. However, Sakakibara discloses in Figures 4-9, setting a charging current in accordance with said temperature (Column 2, lines 11-12, 21-26,) said setting step further including the step of minimizing said discharging current when said

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temperatures higher than a first predetermined threshold value; and charging the battery at said charging current (column 2, lines 32-34, Column 3, lines 60-67, and Column 4, lines 1-10) (Noted that the charging current is adjusted based on the temperature value, it is also evident that when the charging current is increased the discharging current is decreased ). It would have been obvious to a person having ordinary skill in the art to use a charging means for charging the battery based on a battery temperature as taught by Sakakibara in Ng et. al. device in order to provide a battery charger capable of 100% charging a battery without overcharging and overheating. Iwaizono discloses in abstract, setting a discharging current in accordance with said temperature. It would have been obvious to a person having ordinary skill in the art to use a charging means for discharging the battery based on a battery temperature as taught by Iwaizono in Ng et. al. device in order to control charging and discharging operations of a power storage device without damaging energy saving effects provided by charging.

### ***Response to Arguments***

3. Applicant's arguments with respect to claim 43 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

The allowed claims and the reason of allowance are indicated in the previous OA.

### ***Conclusion***


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Berhanu whose telephone number is 571-272-8430. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB

  
BAO Q. VU  
PRIMARY EXAMINER